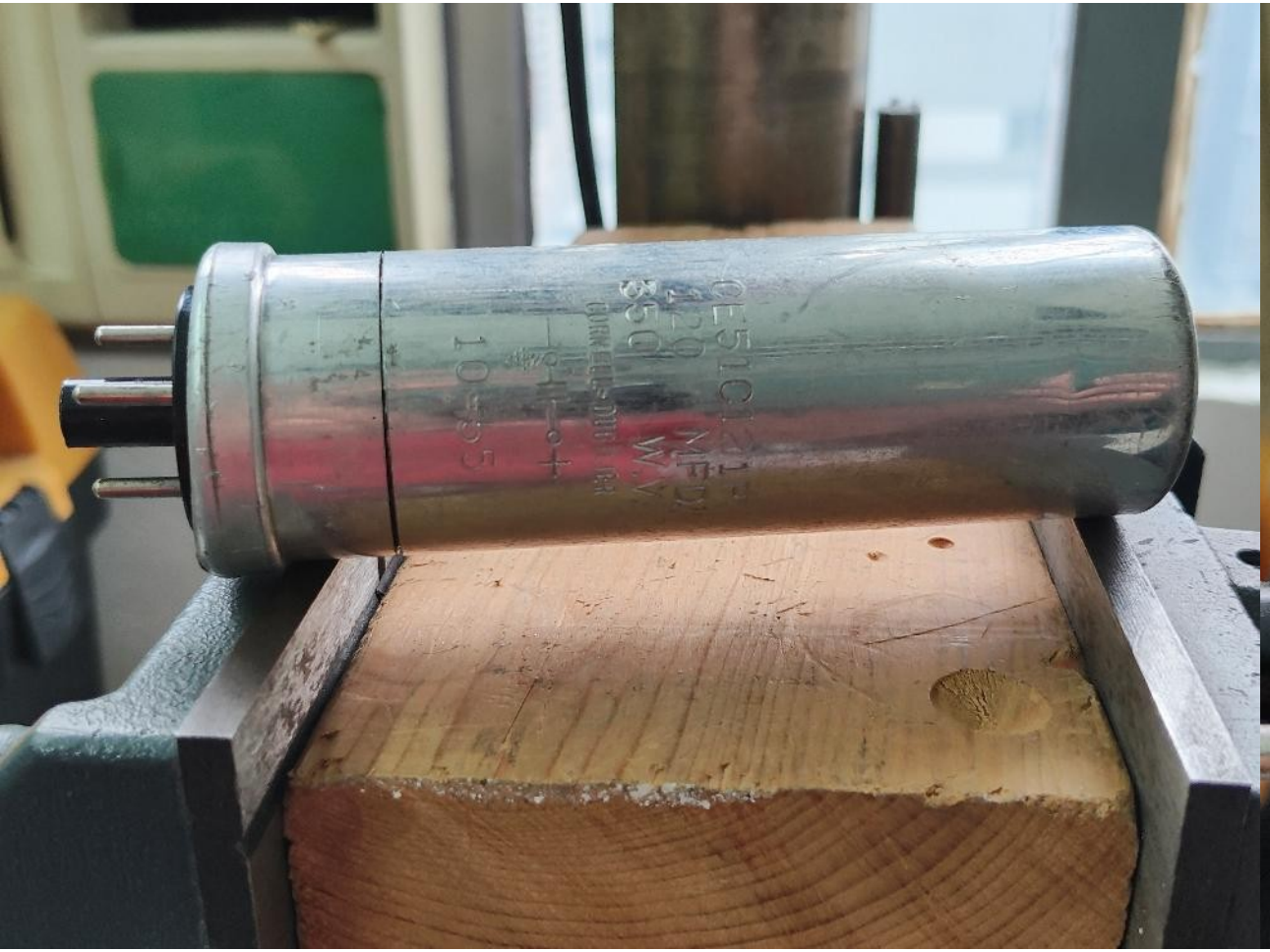
# Vintage Radio Restoration
# Emptying/Refilling Vintage Electrolytic Capacitor

27-Jul-2026, Virgil Cheng, vr2xgm

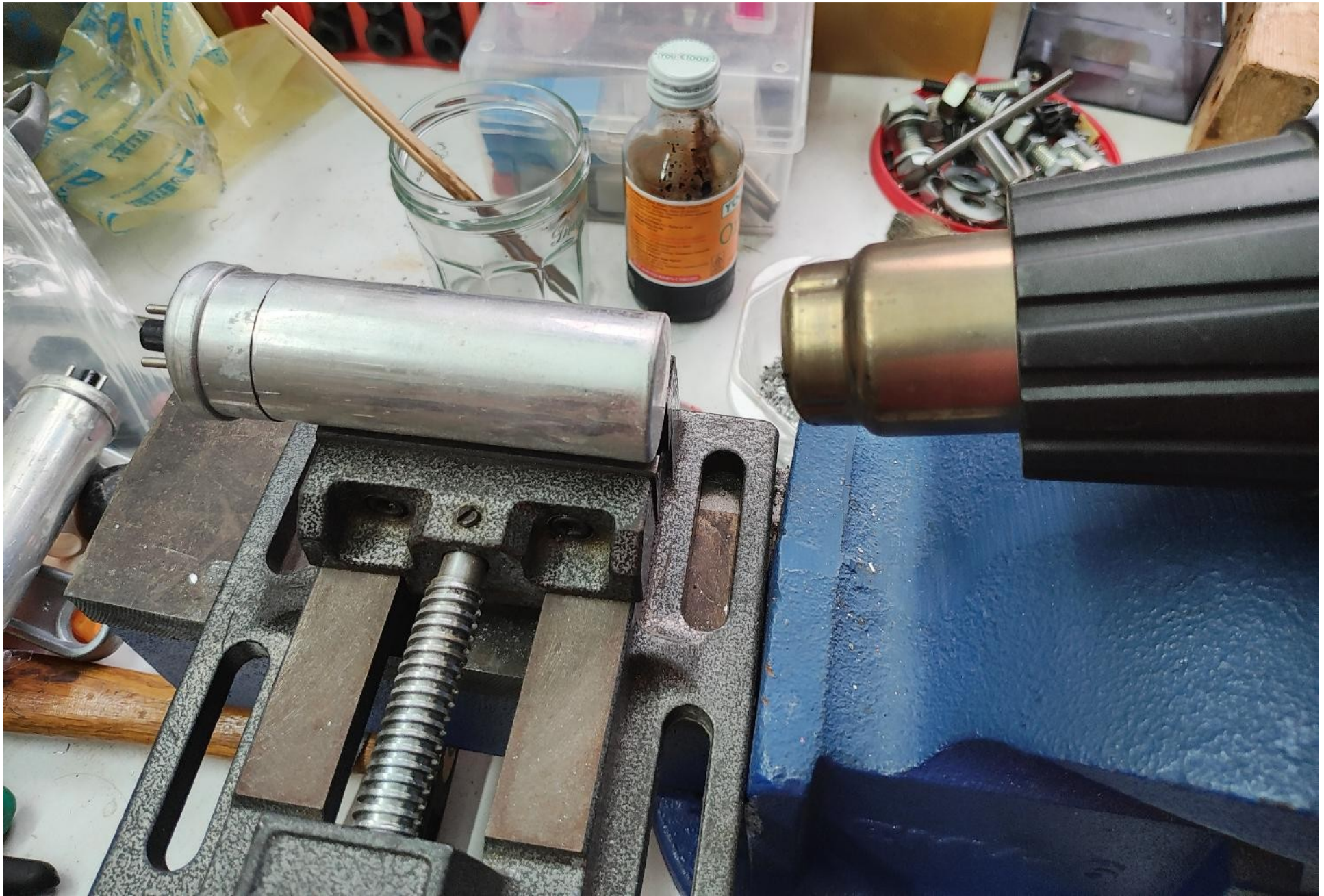
Capacitors from an AN/SRR-13 radio PSU module, in storage for almost 20 yrs

Slit open metal can with a Dremel cutter disc mounted on drill press, using can top as height reference, this particular can bulged at the top, was supported with a suitable size plastic bottle cap instead. Pipe cutter seems convenient but tends to deform cutting edge inward and leave scratches on surface. Select suitable slit distance from bottom for working room/sufficient sealing space/marking avoidance etc. , ¾ “ here

Cutting depth just enough to clear metal thickness and avoid tar material inside which could jam cutter and damage metal can surface .



Capacitor foil roll position usually fixed with tar adhesive, heat can w/~120°C setting to soften tar material, ensure good ventilation for possible toxic vapor.



Metal can pulled out, there were unfortunate cases where adhesive tar covered the whole length, capacitor roll removal could be difficult and time-consuming. Worst case is digging out capacitor roll bit by bit.

Not a good scene, remove and dispose capacitor roll.

Soften/dissolve remaining tar inside can, use kerosene/turpentine instead of volatile thinner for safety and marking/printing preservation, leave in sealed container for several hours for solvent to take effect.

Cleaning complete, ready for capacitor refill

This is example from a R-1490 radio with GT socket, showing one possible method reconnecting capacitor terminals. Capacitor housing plastic shrink wrap is not considered as safety insulation, capacitors can/lead-wires need to be additionally  insulated from metal can, especially in high voltage applications.

# Another example on a Hammarlund SP-600

# Example from a TV-2 tube tester

Example from a Fisher FM-200B tuner

# Sealing capacitor metal can after re-fill

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